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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,831	11/29/2001	Nicholas Jason Welton	HBF 5560	6440

7590 06/13/2002

Senniger Powers Leavitt & Roedel  
One Metropolitan Square 16th Floor  
St. Louis, MO 63102

EXAMINER

RAJGURU, UMAKANT K

ART UNIT PAPER NUMBER

1711

DATE MAILED: 06/13/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

12-7

# Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) ~~1, 2, 5-11~~ 1, 2, 5-11 and 15-28 is/are pending in the application.  
Of the above claim(s) 15-28 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1, 2 and 5-11 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 6
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 2 and 5-11, drawn to a composition, classified in class 524, subclass 405.
- II. Claim 15-27, drawn to a laminate, classified in class 428, subclass 422.
- III. Claim 28, drawn to a building product, classified in class 52, subclass 201.

The inventions are distinct, each from the other because:

Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP§806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP§806.04(h)). In the instant case, the intermediate product is deemed to be useful as a material for powder coating and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions I and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP§806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP§806.04(h)). In the instant case, the intermediate product

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is deemed to be useful as a material for powder coating and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions II and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP§806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP§806.04(h)). In the instant case, the intermediate product is deemed to be useful as a film for packaging and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Attorney Vincent M. Keil on April 29, 2002 a provisional election was made without traverse to prosecute the invention of I, claim 1, 2 and 5-

11. Affirmation of this election must be made by applicant in replying to this Office action. *done Feb 21, 2003*

Claim 15-28 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

3. A pre amendment (paper no 5) and an IDS (paper no 6) have been filed on Nov 29, 2001.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 2, 5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grunewalder et al (USP 5366899) in view of (a) JP 54034359 or Eleik (USP 4129535) and (b) Batdorf (USP 4965309) or Elcik (USP 4129535)

(JP '359 is of record on international pre-exam report).

Grunewalder describes a capstock polymer composition comprising 0-90% of a fluoropolymer-acrylic polymer blend comprising (a) polymers or copolymers of fluoroolefin, (b) a first acrylic polymer and (c) a second acrylic polymer (col. 8, lines 1-20). The composition includes pigments, fillers, lubricants and other additives (col. 4, line 61 to col. 5, line 7). The composition is melted and extruded (see examples). The fluoropolymer is a halogen donor component.

Grunewalder does not mention halogen volatilization agent and char inducing component (instant claim 1).

JP '359 discloses a composition comprising a polymer mixture consisting of (a) 95-35 parts by wt of a polyester and (b) 5-65 parts by wt of methacrylate polymer containing polymethyl methacrylate, a halogen compound, an antimony compound and an inorganic filler.

Batdorf discloses smoke suppressant compositions to be used with halogen containing plastics (abstract). Zinc borate is used as an ingredient of the composition (col. 9, lines 51-54).

Elcik describes fire retardant polyvinyl chloride-containing compositions comprising antimony trioxide and zinc borate (col. 3, lines 24-33; 61-64).

Therefore it would have been obvious to add to the composition of Grunewalder (a) the antimony compound (of JP '359 or Elcik) to reduce density of smoke and (b) Zinc borate (of Batdorf or Elcik) to reduce spreading of flame.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grunewalder et al (USP 5322899) in view of (a) JP 54034359 or Elcik (USP 4129535) and (b) Batdorf (USP 4965309) or Elcik (USP 4129535) as applied to claim 1 above, and further in view of Dany et al (USP 4032498) or Bergner (USP 5200446).

Prior art is silent about the (claimed) k-value of halogen containing polymer, which can be polyvinyl chloride.

Dany discloses flame retardant plasticizers for PVC wherein PVC has a K value of 70 (col. 6, lines 60-61)

Bergner uses PVC of K value ranging from 60-68 in examples 6, 7 and 8 (col. 8 and 9).

Therefore it would have been obvious to one to use PVC of claimed K value since such a PVC is known to produce molding compositions, possessing better mechanical properties.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to U.K. Rajguru whose telephone number is 703-308-3224. The examiner can normally be reached on Monday-Friday from 9:30 am to 6:00 pm.

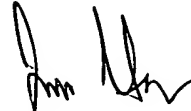
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Examiner Rajguru/ng/dh  
June 10, 2002



James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700